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a display controller controlling to change the display of the object [image] in accordance with the recognized, simulated manipulation of the object[,] and object information for the displayed object [image], including data relative to a type of the displayed object.

56. (ONCE AMENDED) A controller for use with a display device to manipulate an object displayed on the display device and an input device responsive to a touching contact relative to the displayed object [image], the touching contact simulating said manipulation[,] and the input device [outputting] producing corresponding touch information; the controller comprising:

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a storage unit storing a plurality of object information, each object information specifying a responsive manipulation type of each object; and

a display controller controlling to change the display of the object [image] in accordance with the touch information and the stored object information specifying a manipulation type of the object.

57. (ONCE AMENDED) An apparatus for use with a display device to manipulate an object [image] displayed on the display device, the apparatus comprising:

an input device [inputting] responding to a manipulation to the displayed object and [outputting] producing corresponding input information;

a storage unit storing object information specifying an object [having] and its center of gravity;

a display controller controlling to change the display of the object [image] in accordance with the input information and the object information.

58. (ONCE AMENDED) An apparatus according to claim 57, wherein:

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said input device is responsive to a touching contact relative to the displayed object [image], the touching contact simulating said manipulation, and [outputs] produces corresponding touch information; and

said display controller controls the display of the object [image] in accordance with the touch information and the object information.

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59. (ONCE AMENDED) An apparatus according to claim 57, wherein, in response to touch information indicating a movement such that the touching contact touches the object at its center or its center of gravity, moves and stops while keeping in contact with the object, said display controller recognizes the movement as a push manipulation and controls the display of the object so that the object moves from where the [body] touching touches the object to where the [body] touching stops.

60. (ONCE AMENDED) An apparatus according to claim 57, wherein in response to touch information indicating a movement such that the touching contact touches [the] said object at a position off the center or the center of gravity thereof, moves and stops on said touch panel while keeping in contact with the object, said display controller controls the object [image] on the display device so that the object moves while rotating from where the touching contact touches the object to where the [body] touching contact stops.

61. (ONCE AMENDED) A controller for use with a display device to manipulate an object displayed on the display device and an input device inputting a manipulation to the displayed object and [outputting] producing corresponding input information, the controller comprising:

a storage unit storing object information specifying object [having] and its center of gravity;

a display controller controlling to change the display of the object [image] in accordance with the input information and the object information.

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62. (ONCE AMENDED) A method for simulating manipulation of a displayed object, comprising:

displaying an [image of an] object;
responding to a manipulation [to] of the displayed object [from] at an input device [and outputting] producing corresponding input information;

controlling to change the display of the object [image] in accordance with the input information and the object information, specifying the object [having] and its center of gravity, stored in a storage unit.

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63. (ONCE AMENDED) A computer readable medium storing therein a computer program affording simulated manipulation of the displayed object, said computer program comprising:

a first function of responding to a manipulation [to] of the displayed object [from] at an input device [and outputting] producing corresponding input information;

a second function of controlling to change the display of the object [image] in accordance with the input information and the object information, specifying the object [having] and its center of gravity, stored in a storage unit.

64. (ONCE AMENDED) An apparatus for use with a display device to manipulate an object displayed on the display device, the apparatus comprising:

an input device inputting a manipulation to the displayed object and [outputting] producing corresponding input information;

a storage unit storing object information specifying the object as being subject to inertia;

a display controller controlling to change the display of the object [image] in accordance with the input information and the object information.

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65. (ONCE AMENDED) An apparatus according to claim 64, wherein:
said input device is responsive to a touching contact relative to the displayed object, [image, the touching contract] simulating said manipulation, and [outputs] produces corresponding touch information; and
said display controller controls the display of the object [image] in accordance with the touch information and the object information.

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66. (ONCE AMENDED) An apparatus according to claim 65, wherein, in response to touch information indicating [a movement such] that a touching contact touches the object while moving at a speed from a position apart therefrom [at a speed], said display controller recognizes the movement as a flip manipulation and controls the display of the object so that the displayed object moves a distance proportional to the speed and in the direction [toward] in which the touching contact [touches] was moving, upon touching the object.

67. (ONCE AMENDED) An apparatus according to claim 66, wherein in response to touch information indicating [a movement such] that a touching contact touches the object while moving at a speed from a position apart therefrom [at a speed,] and, in response to object information specifying that the object is subject to gravity, said display controller controls the display of the object on the display device so that the displayed object moves a distance, and along a trajectory, proportional to the speed [and along a trajectory].

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68. (ONCE AMENDED) A controller for use with a display device to manipulate an object displayed on the display device and an input device inputting a manipulation to the displayed object and [outputting] producing corresponding input information, the controller comprising:

a storage unit storing object information specifying an object being subject to inertia;
a display controller controlling to change the display of the object [image] in accordance with the input information and the object information.

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69. (ONCE AMENDED) A method for simulating manipulation a displayed object, comprising:

displaying an [image of an] object;
responding to a manipulation to the displayed object [from] at an input device [and outputting] which produces corresponding input information; and
controlling to change the display of the object [image] in accordance with the input information and the object information, specifying the object as being subject to inertia, stored in a storage unit.

70. (ONCE AMENDED) A computer readable medium storing therein a computer program affording simulated manipulation of displayed object, said computer program comprising:

a first function of responding to a manipulation to the displayed object [from] at an input device [and outputting] which produces corresponding input information;

a second function of controlling to change the display of the object [image] in accordance with the input information and the object information, specifying the object as being subject to inertia, stored in a storage unit.

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71. (ONCE AMENDED) An apparatus for use with a display device to manipulate an object displayed on the display device, the apparatus comprising:

an input device inputting a manipulation to the displayed object and [outputting] producing corresponding input information;

a display controller controlling to change the display of the object on the display device so that the object moves on the display device from where [the] two touches touch [both] respective, opposite sides of the object to where the two touches stop, in accordance with the input information indicating a movement such that the two [contact] touches touch [both] respective, opposite sides of the object and move.

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72. (ONCE AMENDED) An apparatus according to claim 71, wherein said input device is responsive to [a touching contact] the two touches relative to the displayed object [image, the touching contact] and simulating said manipulation, and outputs corresponding [touch] said input information[,]; and

the display controller controlling to change the display of the object [image] on the display device so that the displayed object moves on the display device from where the two [touching contract] touches touch [both] respective, opposite sides of the displayed object to where the two [touching contact] touches stop touching the object, in accordance with the touch information indicating a movement such that the two [touching contact] touches touch [both] the respective, opposite sides of the object and move.

73. (ONCE AMENDED) An apparatus of claim 72, further comprising:
a storage unit storing position information which specifies the position where the object is displayed on the display device;

wherein the display controller, in accordance with the touch information and display position information, recognizes [that] a movement such that the two [touching contact]

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~~touches touch [both] the respective, opposite sides of the object and move, and controls the object on the display device so that the object moves on the display device from where the two touching touch both sides of the object to where the two touching stop.~~

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74. (ONCE AMENDED) A controller for use with a display device to manipulate an object displayed on the display device and an input device inputting a manipulation to the displayed object and [outputting] producing corresponding input information, the controller comprising:

a display controller controlling to change the display of the object on the display device so that the object moves on the display device from where the two touches touch [both] respective, opposite sides of the object to where the two touches stop such touching, in accordance with the input information indicating a movement such that the two [contact] touches touch [both] the respective, opposite sides of the object and move.

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75. ~~(NEW)~~ A method for simulating manipulation of a displayed object, comprising:

displaying an [image of an] object;

responding to a manipulation to the displayed object [from] at an input device [and outputting] which produces corresponding input information;

controlling to change the display of the object on the display device so that the object moves on the display device from where the two touches touch [both] the respective, opposite sides of the object to where the two touches stop such touching, in accordance with the input information indicating a movement such that the two [contact] touches touch [both] the respective, opposite sides of the object and move.

76. (ONCE AMENDED) A computer readable medium storing therein a computer program affording simulated manipulation of displayed object, said computer program comprising:

Sub a first function of responding to a manipulation to the displayed object [from] at an input device [and outputting] which produces corresponding input information;

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77. (ONCE AMENDED) An apparatus for use with a display device to manipulate an object displayed on the display device, the apparatus comprising:

an input device inputting a manipulation to the displayed object and [outputting] producing corresponding input information; and

a display controller controlling to change the display of the object [image] in a rolling condition, in accordance with the input information.

78. (ONCE AMENDED) An apparatus according to claim 77, wherein:
said input device is responsive to a touching contact relative to the displayed object [image], the touching contact simulating said manipulation, and [outputs] produces corresponding touch information; and

said display controller controls the display of the object [image] in a rolling condition, in accordance with the touch information.

79. (ONCE AMENDED) The apparatus according to claim 78, further comprising:

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a storage unit storing object information indicating that the object is rollable; and
[wherein] said display controller controls the display of the object in a rolling
condition, in accordance with the touch information.

80. (ONCE AMENDED) A controller for use with a display device to manipulate
an object displayed on the display device and [in] an input device inputting a manipulation to
the displayed object and [outputting] producing corresponding input information, the controller
comprising:

a display controller changing the display of the object, [image] in accordance with the
input information, in a rolling condition.

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81. (ONCE AMENDED) A method for simulating manipulation of a displayed
object, comprising:

displaying an [image of an] object;
responding to a manipulation to the displayed object [from] at an input device and
[outputting] producing corresponding input information; and
controlling to change the display of the object [image] in a rolling condition, in
accordance with the input information.

82. (ONCE AMENDED) A computer readable medium storing therein a computer
program affording simulated manipulation of [the] a displayed object, said computer program
comprising:

a first function of responding to a manipulation to the displayed object [from] at an
input device and [outputting] producing corresponding input information; and

a second function of controlling to change the display of the object [image] in a rolling
condition, accordance with the input information.

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83. (ONCE AMENDED) An apparatus for use with a display device to manipulate an object displayed on the display device, the apparatus comprising:

an input device responsive to a touching contact, relative to the displayed object [image], [outputting] and producing corresponding input information;

a storage unit storing object information about a large [one] object extending beyond a display area of the display device; and

a display controller, in accordance with the object information and the input information indicating a movement such that the touching contact moves a distance more than a predetermined distance or the touching contact moves [in] at a speed higher than a predetermined speed, controlling to display the object on the display device in a scroll condition.

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84. (ONCE AMENDED) An apparatus according to claim 83, wherein said display controller controls to start the scroll [in a] condition at a first speed and gradually decreases [the speed of] the scroll condition to a second, lower speed.

85. (ONCE AMENDED) An apparatus according to claim 84, wherein said [starting] first speed of the scroll condition depends on said speed at which, or said distance at once which, said touching contact moves.

86. (ONCE AMENDED) An apparatus according to claim 83, wherein said display controller controls to [start scroll in a speed and] decrease the speed of the scroll condition in a case where another touching contact does not occur.

87. (ONCE AMENDED) An apparatus according to claim 84, wherein said display controller controls to continue the scroll condition in a case where another touching contact occurs before [stop of] the scroll condition steps.

88. (ONCE AMENDED) An apparatus according to claim 83, wherein said display controller controls to stop the scroll condition in a case where the touching contact stops in the scrol[ling] condition of the displayed object.

89. (ONCE AMENDED) A controller for use with a display device to manipulate an object displayed on the display device and an input device responsive to a touching contact relative to the displayed object [image, outputting] and producing corresponding input information, the controller comprising:

a storage unit storing object information about a large [one] object extending beyond a display area of the display device; and

a display controller, in accordance with the object information and the input information indicating a movement, such that the touching contact moves a distance more than a predetermined distance or the touching contact moves [in] at a speed higher than a predetermined speed, controlling to display the object on the display device in a scroll condition.

90. (ONCE AMENDED) A method for simulating manipulation of a displayed object, comprising:

displaying an [image] object of a part of an object which extends beyond a display area; responding to a touching contact to the displayed object, at [from] an input device responsive to a touching contact to the displayed object [from an input device responsive to a

touching contact relative to the displayed object image] and [outputting] producing
corresponding input information; and

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controlling to display the object on the display device in scroll condition, in accordance
with the input information indicating a movement such that the touching contact moves a
distance more than predetermined distance or the touching contact moves [in] at a speed higher
than a predetermined speed.

91. (ONCE AMENDED) A computer readable medium storing therein a computer
program affording simulated manipulation of displayed object, said computer program
comprising:

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a first function of responding a manipulation to a displayed object from an input device
responsive to a touching contact relative to the displayed object [image] and [outputting]
producing corresponding input information, said displayed object extending beyond a display
area; and

a second function of controlling to display the object on the display device in scroll
condition, in accordance with the input information indicating a movement such that the
touching contact moves a distance more than predetermined distance or the touching contact
moves [in] at a speed higher than a predetermined speed.

92. (ONCE AMENDED) An apparatus for use with a display device to manipulate
an object displayed on the display device, the apparatus comprising:

an input device inputting a manipulation to the displayed object [image, outputting] and
producing corresponding input information;

a storage unit storing object information specifying that the object is a large [one] object
extending beyond a display area of the display device; and

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a display controller, in accordance with the object information and the input information indicating a movement, such that the contact of the manipulation moves a distance more than predetermined distance or a contact of the manipulation moves [in] at a speed higher than a predetermined speed, controlling to display the object on the display device in a scroll condition.

93. (ONCE AMENDED) An apparatus according to claim 92, wherein said display controller controls to start the display of the object in the scroll [in a] condition and at a first speed, and to gradually decrease the speed of the scroll condition to a lower, second speed.

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94. (ONCE AMENDED) An apparatus according to claim 93, wherein said starting speed of the scroll condition depends on [said] a speed, or [said] a distance, at or over which said contact moves.

95. (ONCE AMENDED) An apparatus according to claim 92, wherein said display controller controls to starts the scroll condition in [a] the first speed [and] the decrease the speed of the scroll in a case where another contact does not occur.

96. (ONCE AMENDED) An apparatus according to claim 93, wherein said display controller controls to continue the scroll condition in a case where another contact occurs before [stop of] the scroll condition stops.

97. (ONCE AMENDED) An apparatus according to claim 92, wherein said display controller controls to stop the scroll condition in a case where the contact stops moving [in scrolling].

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98. (ONCE AMENDED) A controller for use with a display device to manipulate an object displayed on the display device and [in] an input device inputting a manipulation to the displayed object [image, outputting] and producing corresponding input information, the controller comprising:

a storage unit storing object information specifying that the object is a large [one] image extending beyond a display area of the display device; and

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a display controller, in accordance with the object information and the input information indicating a movement such that a contact of the manipulation moves a distance more than a predetermined distance or a contact of the manipulation moves [in] at a speed higher than a predetermined speed, controlling to display the object on the display device in scroll condition.

99. (ONCE AMENDED) A method for simulating manipulation of a displayed object, comprising:

displaying [an image of apart] a part of an object which extends beyond a display area;

responding to a manipulation to the displayed object from an input device; and

controlling to display the object on the display device in scroll condition, in accordance with the input information indicating a movement such that a contact of the manipulation moves a distance more than predetermined distance or the a contact of the manipulation moves [in] at a speed higher than a predetermined speed.

100. (ONCE AMENDED) A computer readable medium storing therein a computer program affording simulated manipulation of displayed object, said computer program comprising:

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a first function of responding a manipulation to a displayed object from an input device outputting corresponding input information, said displayed object extending beyond a display area; and

a second function of controlling to display the object on the display device in scroll condition, in accordance with the input information indicating a movement such that a contact of the manipulation moves a distance more than predetermined distance or a contact of the manipulation moves [in] at a speed higher than a predetermined speed.

101. (NEW) An apparatus controlling a display of an object in accordance with a simulated manipulation of the object produced by a corresponding touching contact on an input device, relative to the displayed object, the input device producing corresponding touch information and the apparatus comprising:

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a detector detecting, from the touch information, characteristics of said touching contact including the selected location on the displayed object of the touching contact and changes of the touching contact and recognizing therefrom the corresponding object manipulation simulated thereby; and

a display controller controlling to change the display of the object in accordance with the recognized, simulated manipulation of the object and object information for the displayed object, including data relative to a type of the displayed object.

102. (NEW) An apparatus controlling a display of an object in accordance with a simulated, selected manipulation of the object produced by corresponding touching contact on an input device, relative to the displayed object, the input device outputting corresponding touch information and the apparatus comprising:

a storage unit storing a plurality of object information, each object information specifying a responsive manipulation type of each object; and

a display controller controlling to change the display of the object in accordance with the touch information and stored object information specifying a manipulation type of the object.

103. (NEW) An apparatus controlling manipulation of an object displayed on a display device, the apparatus comprising:

an input device inputting a manipulation to the displayed object and producing corresponding input information;

a storage unit storing, for the displayed object, objection information specifying a center of gravity of the displayed object; and

a display controller controlling changes in the displayed object in accordance with the input information and the respective, stored object information.

104. (NEW) An apparatus controlling manipulation of an object displayed on a display device in accordance with inputting a manipulation to the displayed object on an input device which produces corresponding input information, the apparatus comprising:

a storage unit storing object information specifying a center of gravity of the object corresponding to the displayed object; and

a display controller controlling changes in the displayed object in accordance with the input information and the object information.

105. (NEW) A method simulating manipulation of a displayed object, comprising:
displaying an image of an object;
responding to a manipulation of the displayed object by an input device, which produces corresponding input information; and

controlling changes in the displayed object in accordance with the input information and stored object information specifying a center of gravity of the respective object.

106. (NEW) A computer readable medium storing therein a computer program affording simulated manipulation of a displayed object by:

responding to a manipulation of the displayed object, as input to an input device, which produces corresponding input information; and

controlling changes in the displayed object in accordance with the input information and stored object information specifying a center of gravity of the respective object.

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107. (NEW) An apparatus manipulating on object displayed on a display device, of a respective object, the apparatus comprising:

an input device inputting a manipulation to the displayed object and producing corresponding input information;

a storage unit storing object information specifying, for the displayed object, that the displayed object is subject to inertia; and

a display controller controlling changes in displayed object in accordance with the input information and the stored object information for the requisite object.

108. (NEW) An apparatus manipulating an object displayed on a display device in response to an input device inputting a manipulation to the displayed object and producing corresponding input information, the system comprising:

a storage unit storing object information specifying the object as being subject to inertia; and

a display controller controlling changes in the displayed object in accordance with the input information and the stored object information.

109. (NEW) A method for simulating manipulation of a displayed object,
comprising:

displaying an object;

responding to a manipulation to the displayed object, input to an input device which
produces corresponding input information; and

controlling changes in the displayed object in accordance with the input information and
stored object information specifying the object as being subject to inertia.

110. (NEW) A computer readable medium storing therein a computer program
affording simulated manipulation of a displayed object by:

responding to a manipulation to the displayed object, input to an input device which
produces corresponding input information; and

controlling changes in the displayed object in accordance with the input information and
stored object information specifying the object as being subject to inertia.
